

NEW SPECIES AND NAMES IN ZALUZANIA AND VIGUIERA

(ASTERACEAE-HELIANTHEAE).

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Recent collections from northwestern Mexico have revealed a new species of Zaluzania, which I describe below. In addition, I have had to rechristian my recently described Viguiera conquistii from Oaxaca, Mexico, there being an earlier described fossil plant with this name.

Zaluzania delgadoana B. L. Turner, sp. nov.

Zaluzania megacaphala accedens sed foliis parvioribus valde petiolatis, pubescentiis hirsutulis, capitulis parvioribus.

Shrub 1.2-3.0 m high. Stems terete, brittle, densely hirsutulose. Leaves 3-4 cm long, 1.5-2.7 cm wide; petioles 6-10 mm long, hirsutulose; blade deltoid-triangular to nearly cordate, abruptly truncate to cordate at the base or rarely ovate and tapering onto the petiole, densely short hirsutulous on both surfaces, the lower surface very veiny and abundantly covered with punctate atomiferous glands, the margins inconspicuously crenulodentate. Heads hemispheric, 30-40, in rounded, terminal cymules, 7-10 cm across, 4-7 cm high. Involucre broadly campanulate, 2-3 seriate, 3.5-4.5 mm high, 7-9 mm wide; bracts subequal, lance-ovate (outer) to oblanceolate (inner) and somewhat trifid, densely puberulent and atomiferous glandular. Receptacle conicle, ca 2.5 mm high, ca 1.5 mm across. Chaff persistent; pales ca 4 mm long, pubescent, 3-lobed apically. Ray florets 5-8, pistillate, fertile; corollas yellow, 5-6 mm long; tube ca 1 mm long; lamina ca 5 mm long, ca 4 mm wide. Disk florets numerous; corollas yellow, ca 3 mm long, pubescent, the tube lapping-over and capping the achene. Anthers yellow. Achenes of both ray and disk florets similar, epappose, ca 3 mm long, glabrous.

HOLOTYPE: MEXICO. DURANGO: Mpio. Nombre de Dios, Puente Nombre de Dios, a 47 km de los limites Zacatecas-Durango, sobre la carretera que va a Durango. Matorral con Opuntia, Mimosa y Condalia. Ladera muy pedregosa y perubada, 1790 m, 6 Nov 1978, J. Garcia P. y A. Delgado S. 873 (holotype TEX; isotypes MEXU, to be distributed).

ADDITIONAL COLLECTION: DURANGO: Mpio. Nombre de Dios, ca 4 km W de la Parrilla, ca 2050 m, 25 Oct 1983, S. Gonzalez & S. Acevedo

2760 (TEX); 28.1 mi E of intersection of highways 40 and 45, along highway 45, 28 Sep 1984, Sundberg & Lavin 2903 (MEXU, TEX).

The holotype describes the plant as a frequent "Arbusto de 1.2 m de alto, tallos principales partiendo casi desde la base...". Gonzalez & Acevedo note the plant to be common, 2-3 m high, occurring in a "matorral de Juniperus, con Rhus, Prosopis y Condalia en las partes bajas."

I have retained the holotype several years now thinking this might be an aberrant specimen of the widespread, highly variable, Viguiera dentata (Cav.) Spreng. with epappose achenes. The arrival of two additional collections from approximately the same area convinced me that it was an undescribed taxon, perhaps belonging to Viguiera, but on technical grounds better placed in the small genus Zaluzania. The latter is kept out of Viguiera primarily by its pistillate fertile ray florets, those of Viguiera possessing sterile achenes. If positioned in Viguiera, it would fit most comfortably in the Section Chloracra near or in the series Pinnatilobatae (Blake, 1918). Olsen (1979), in his monograph of the genus, also reckoned Zaluzania to be related to the Section Chloracra favoring the series Grammatoglossae since the species of that group show "a tendency for the tube of the disc corolla to become expanded to form a cap over the achene." Such tendencies also occur in the series Pinnatilobatae. In any case Olsen transferred Zaluzania grayana Rob. & Greenman, which has a "capping" corolla, to Viguiera, series Grammatoglossae, largely because it possessed sterile ray florets and a base chromosome number of $x=17$.

I suspect that sterile versus fertile ray achenes is but the expression of a few genes. The overall morphology of Zaluzania strongly suggests that it belongs in Viguiera, the present species, what with its Viguiera-like leaves, tends to bridge the "eye-ball" gap and it should be noted that occasional specimens of Zaluzania at TEX show neuter ray florets, and presumably sterile achenes (e.g. Z. megacephala Sch.-Bip.; Hinton 18621, Sundberg et al. 1903, etc.).

It is a pleasure to name this species for Dr. Alfonso Delgado, ex-student at the University of Texas and currently curator of the herbarium, UMEX, and among the first to participate in its discovery.

Viguiera neocronquistii B. L. Turner, nom. nov. - Viguiera cronquistii B. L. Turner *Phytologia* 57: 494. 1985. - not V. cronquistii Becker, *Palaeontographica* 127: 126. 1969, a fossil plant.

I am embarrassed to admit that in describing V. cronquistii memory failed its function, for I was once fully aware of Becker's fossil name, having commented upon its possible validity, as noted by Crepet and Stuessy (1978) in their reappraisal of the compression concerned.

But perhaps my subconscious would not permit me to acknowledge a fossil Cronquist! He's living and well as we all know, hence the more appropriate, neocronquistii. I am grateful to Tod Stuessy, my ex-student, who called the error to my attention without the least hint of a snicker.

LITERATURE CITED

- Blake, S. F. 1918. A revision of the genus Viguiera. Contr. Gray Herb. 54: 1-205.
- Crepet, W. L. and T. F. Stuessy. 1978. A reinvestigation of the fossil Viguiera cronquistii (Compositae). Brittonia 30: 483-491.
- Olsen, J. S. 1979. Systematics of Zaluzania (Asteraceae-Heliantheae). Rhodora 81: 449-500.